

What is claimed is:

1. A camera which takes a picture of a subject, the camera comprising:

a flash emission device which emits flashing light in synchronization with a picture-taking operation, and which controls the amount of emitted light by selecting an emission time period, the flash emission device having:

a temperature sensor which detects temperature;

a storage section which stores a computation expression by which an emission time period for obtaining a predetermined amount of emitted light is obtained by using temperature as a variable; and

an emission control section which obtains an emission time period from the temperature obtained from the temperature sensor on the basis of the computation expression, and which controls the emission time period so that light is emitted only for the obtained emission time period.

2. The camera according to claim 1, wherein the computation expression is represented by an expression including a linear expression in each of temperature ranges and expressed by a polygonal line as a whole.

3. A camera which takes a picture of a subject, the camera comprising:

a flash emission device which performs preliminary light emission before a picture-taking operation, and which performs main light emission in synchronization with the picture-taking operation, the flash emission device having:

a main capacitor in which charge for emission of flashing light is accumulated;

a light emitting section which emits flashing light by receiving electric power from the main capacitor;

a voltage monitor which detects the voltage across the main capacitor before the main light emission;

an emission time computation section which obtains, on the basis of the detected voltage obtained by the voltage monitor, an emission time period such that the same amount of light as the amount of light when light is emitted for a predetermined reference emission time period when the voltage across the main capacitor is equal to a predetermined reference voltage can be obtained; and

an emission control section which controls light emission so that flashing light is emitted only for the emission time period obtained by the emission time computation section.

4. The camera according to claim 3, wherein an aperture at the time of main light emission is variable, and the reference emission time period is a time period according to the aperture at the time of main light emission.

5. The camera according to claim 3, further comprising a temperature sensor which detects temperature, wherein the reference emission time period is a time period according to the temperature detected by the temperature sensor.

6. The camera according to claim 3, further comprising a distance sensor which detects a subject distance, wherein the reference emission time period is a time period according to the subject distance detected by the distance sensor.

7. The camera according to claim 3, wherein the emission time computation section stores a computation expression by which the reference emission time period is obtained.

8. The camera according to claim 7, wherein if the reference emission time period is  $T_f$ ; the reference voltage is  $V_f$ ; the detected voltage is  $V$ ; a constant corresponding to a time delay from a moment at which an emission start instruction is issued to a moment at which light emission is started is  $t_0$ ; and the emission time period is  $T$ , the emission time computation section obtains the emission time period  $T$  by

$$T = (T_f - t_0) \times (V_f/V) + t_0 \dots (1)$$

9. The camera according to claim 8, wherein when the emission time period  $T_f$  is longer than a predetermined time period  $T_1$  of

30  $\mu$ sec or longer, the emission time computation section obtains the emission time period T by

$$T = T_f \times (V_f/V) \dots (2)$$

instead of the equation (1).